```
Set      Items   Description
S1         174   (TOLERIZ? OR TOLERANCE OR TOLERANT) (S) (FETAL (3N) THYMUS)
S2           0   S1 (S) (VECTOR? OR RETROVIR? OR ADENOVIR? OR PLASMID?)
S3         369   (TOLERIZ? OR TOLERANCE OR TOLERANT) (S) FETAL (S) (THYMUS -
             OR THYMOCYTE?)
S4           8   S3 (S) (PLASMID? OR VECTOR? OR RETROVIR? OR ADENOVIR?)
S5           2   RD (unique items)
S6          29   (RECOMBINANT OR TRANSDUC?  OR TRANSFECT?) (3N) (FETAL (2N)
             (THYMOCYTE? OR T OR LYMPHOCYTE?))
S7           7   S6 (S) THYMUS
S8           2   RD (unique items)
S9          33   FETAL (W) T (W)LYMPHOCYTE?
S10          0   S9 (5N) (TRANSFECT? OR TRANSDUC? OR PLASMID? OR VECTOR? OR
              RETROVIR? OR ADENOVIR?)
S11         32   S9 NOT PY>1999
S12         11   RD (unique items)
S13        145   INTRATHYMIC (S) (RETROVIR? OR PLASMID? OR VECTOR? OR ADENO-
             VIR?)
S14         30   S13 (S) (TOLERANCE OR TOLERIZ? OR TOLERANT)
S15         10   RD (unique items)
?s (fetal (3n) thymocyte?) (s) (thymus) (s) (retrovir? or adenovir? or plasmid? or vect
or?)
          621200  FETAL
           83714  THYMOCYTE?
          198787  THYMUS
          316308  RETROVIR?
          125485  ADENOVIR?
          340447  PLASMID?
          544996  VECTOR?
     S16       2   (FETAL (3N) THYMOCYTE?) (S) (THYMUS) (S) (RETROVIR? OR
                   ADENOVIR? OR PLASMID? OR VECTOR?)
?rd
...completed examining records
     S17       1   RD (unique items)
```

CODEN: BLOOA ISSN: 0006-4971
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 37

Human umbilical cord blood (UCB) hematopoietic stem cells (HSC) receive increased attention as a possible target for gene-transfer in gene therapy trials. Diseases affecting the lymphoid lineage, as adenosine deaminase (ADA) deficiency and acquired immunodeficiency syndrome (AIDS) could be cured by gene therapy. However, the T-cell progenitor potential of these HSC after gene-transfer is largely unknown and was up to now not testable in vitro. We show here that highly purified CD34sup +sup + Lineage marker-negative (CD34sup +sup +Linsup -) UCB cells generate T, natural killer (NK), and dendritic cells in severe combined immunodeficient mouse fetal thymus organ culture (**FTOC**). CD34sup +sup +Linsup - and CD34sup +sup +CD38sup -Linsup - UCB cells express the **retroviral** encoded marker gene Green Fluorescent Protein (GFP) after in vitro transduction with MFG-GFP **retroviral** supernatant. Transduced cells were still capable of generating T, NK, and dendritic cells in the **FTOC** , all expressing high levels of GFP under control of the Moloney murine leukemia virus (MoMuLV) long terminal repeat promotor. We thus present an in vitro assay for thymic T-cell development out of transduced UCB HSC, using GFP as a marker gene.

?S11	770	FTOC OR (FETAL(W)THYMUS(W)ORGAN(W)CULTURE?)
S12	54	S11 (S) (RETROVIR? OR ADENOVIR? OR PLASMID? OR VECTOR?)
S13	32	S12 NOT PY>1999
S14	27	S13 NOT (S10 OR S7)
S15	11	RD (unique items)